

- b) determining said allowed access slots at said mobile station based on said parameter; and
- c) using at least one of said determined allowed access slots for performing a random access operation to said base transceiver station.

35. (NEW) A method according to claim 34, wherein said parameter is transmitted via a broadcast channel.

36. (NEW) A method according to claim 35, wherein said broadcast channel is the BCH channel of a WCDMA system.

37. (NEW) A method according to claim 35, wherein said random access is performed via the PRACH uplink channel and the AICH downlink channel of the WCDMA system.

38. (NEW) A method according to claim 1, wherein said parameter defines a subset of available access slots of said mobile communication network.

39. (NEW) A method according to claim 38, wherein said subset is determined by another parameter transmitted from said base transceiver station to said mobile station.

40. (NEW) A method according to claim 39, wherein said other parameter is a timing parameter defining a transmission timing of an uplink access slot.

41. (NEW) A method according to claim 39, wherein said other parameter is transmitted via a broadcast channel.

42. (NEW) A method according to claim 39, wherein the bit number of said parameter is changed in dependence on said other parameter.

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43. (NEW) A method according to claim 42, wherein a transmission of a preamble signature or an acquisition indication is disabled in dependence of the value of said parameter.

44. (NEW) A method according to claim 42, wherein an index of an allowed uplink access slot is calculated on the basis of the value of said parameter and a frame number of a frame used for transmitting an uplink access slot.

45. (NEW) A method according to claim 44, wherein said index is calculated by using the equation

$$i = 3 \cdot N + (F \text{ modulo } 3)$$

where $0 \leq N \leq 2$,

wherein F and N are integer numbers, and F denotes said frame number, and wherein only access slots having indices within the range 0 to 7 are valid.

46. (NEW) A method according to claim ⁴⁴, wherein said index is calculated by using the equation 112

$$i = 4 \cdot N + (\Gamma \text{ modulo } 4)$$

where $0 \leq N \leq 3$,

wherein Γ and N are integer numbers, and Γ denotes a frame number indicating two consecutive ones of said frame numbers of said frame used for transmitting an uplink access slot, and wherein only access slots having indices within the range 0 to 14 are valid.

47. (NEW) A method according to claim 45, wherein said parameter determines an offset to be added to said calculated index.

48. (NEW) A method according to 34, wherein an index of an allowed uplink access slot is determined on the basis of the value of said parameter irrespective of a frame number of a frame used for transmitting an uplink access slot.

49. (NEW) A method according to claim 34, wherein an allowed downlink slot is determined by adding a predetermined value to an index of a received uplink slot.

50. (NEW) A method according to claim 49, wherein said predetermined value is selected in accordance with a timing parameter defining a transmission timing of said uplink slot.

51. (NEW) A method according to claim 34, wherein bit values of a binary expression of said parameter determines a combination of calculated indices obtained for other values of said parameter, said other values corresponding to the binary weights of said binary expression.

52. (NEW) A system for performing random access in a mobile communication network, comprising:

a) a network element **(10)** arranged for transmitting a parameter defining allowed access slots; and

b) a plurality of mobile stations **(20)** arranged for receiving said ~~transmitted~~ parameter, for determining said allowed access slots based on said ^{U/A}received parameter, and ~~for~~ using at least one of said determined allowed access slots for performing a random access operation to said ^{U/A}base transceiver station **(10)**. — 112

53. (NEW) A system according to claim 52, wherein said network element is a WCDMA base transceiver station **(10)** and said mobile station **(20)** is a WCDMA mobile station.

54. (NEW) A network element for a mobile communication network comprising a plurality of mobile stations **(20)**, comprising:

- a) setting means **(14)** for setting a parameter defining allowed access slots for performing a random access operation; and
- b) transmitting means **(11)** for transmitting said parameter to said plurality of mobile stations **(20)**.

55. (NEW) A network element according to claim 54, wherein said network element is a WCDMA base transceiver station **(10)**.

56. (NEW) A network element according to claim 54, wherein said transmitting means **(11)** is arranged to transmit said parameter via a broadcast channel.

57. (NEW) A network element according to claim 54, wherein said setting means **(14)** is arranged to set said parameter in dependence on a timing parameter value defining a transmission timing of an uplink access slot in said random access operation.

58. (NEW) A mobile station for a mobile communication network having at least one network element **(10)** allowing a random access operation, comprising:

- a) receiving means **(21)** for receiving a parameter defining allowed access slots for said random access operation from said network element **(10)**;
- b) determining means **(23)** for determining said allowed access slots based on said received parameter; and
- c) transmitting means **(21)** for transmitting a random access message to said network element **(10)** using at least one of said determined allowed access slots.

59. (NEW) A mobile station according to claim 58, wherein said receiving means **(21)** is arranged to receive said parameter via a broadcast channel.

60. (NEW) A mobile station according to claim 59, wherein said determining means **(23)** is arranged to determine said allowed access slots on the basis of said received parameter and a timing parameter received via said broadcast channel.

62. (NEW) A mobile station according to claim 58, wherein said determining means **(23)** is arranged to determine an index of an allowed uplink access slot on the basis of the value of said parameter irrespective of a frame number of a frame used for transmitting an uplink access slot.

62. (NEW) A mobile station according to claim 58, wherein said determining means **(23)** is arranged to determine an index of an allowed uplink access slot on the basis of the value of said parameter irrespective of a frame number of a frame used for transmitting an uplink access slot.

64. (NEW) A mobile station according to claim 63, wherein consecutive preambles are transmitted a predetermined number of access slots apart.

66. (NEW) A mobile station according to claim 64, wherein said selection means (24) is arranged to perform said random selection any time a preamble needs to be transmitted.